

PULSED INPUT SHUTOFF VALVE

ABSTRACT

Methods and devices for shutting off flow in fluid lines by an automated remote sensor signal, when leakage is detected, are disclosed. A shutoff valve has an inlet for connection to the upstream end of the pressurized fluid line, an outlet for connection to the downstream end of the pressurized fluid line, and a springless actuator for driving a valve between open and closed positions. A normally closed solenoid valve is connected between the upstream end of the pressurized fluid line and the springless actuator. A two-position fluid reset switch is also connected to the springless actuator. The shutoff valve further comprises a region of reduced pressure downstream of the actuator but prior to the outlet for connection to the downstream end of the pressurized fluid line. The region of reduced pressure is connected through the fluid reset switch to the springless actuator.

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